

JAN 05 2009

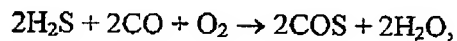
AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A COS treatment apparatus for a gasified gas containing H₂S, H₂O, O₂, and CO, which comprises:

a first reactor into which the gasified gas is to be introduced, the gas having a temperature of at least 300°C; and

a second reactor located at a downstream side of a gasified gas flow with respect to the first reactor,

wherein the first reactor comprises an O₂ removal catalyst for accelerating the following reaction:



the O₂ removal catalyst ~~being a~~ consisting of TiO₂ ~~catalyst-carrying and~~ Cr₂O₃ or consisting of TiO₂ and NiO, and

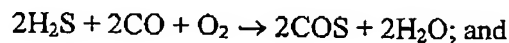
wherein the second reactor comprises a COS conversion catalyst.

2-3. (Cancelled)

4. (Original) The COS treatment apparatus according to claim 1, wherein said O₂ removal catalyst is located in a higher-temperature region with respect to said COS conversion catalyst.

5. (Currently Amended) A COS treatment method for a gasified gas containing H₂S, H₂O, O₂, and CO, the method comprising:

removing O₂ from the gas by using ~~[[a]]~~ an O₂ removal catalyst consisting of TiO₂ ~~catalyst-carrying and~~ Cr₂O₃ or consisting of TiO₂ and NiO at a gas temperature of at least 300°C to accelerate the following reaction:



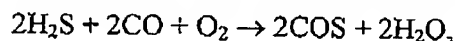
after the removing of O₂ from the gas, converting COS contained in the gas to H₂S by using a COS conversion catalyst.

6-7. (Cancelled)

8. (Previously Presented) The COS treatment method according to claim 5, wherein said removing O₂ from the gas is performed at a higher temperature with respect to said converting COS to H₂S.

9. (Previously Presented) A COS treatment apparatus for a gasified gas containing H₂S, H₂O, O₂, and CO, comprising:

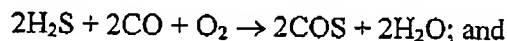
a reactor into which the gasified gas is to be introduced, the reactor comprising a TiO₂ catalyst carrying Cr₂O₃ and BaO, wherein the TiO₂ catalyst carrying Cr₂O₃ and BaO is an O₂ removal catalyst for accelerating the following reaction:



and wherein the TiO₂ catalyst carrying Cr₂O₃ and BaO is a COS conversion catalyst.

10. (Previously Presented) A COS treatment method for a gasified gas containing H₂S, H₂O, O₂, and CO, the method comprising:

removing O₂ from the gas by using a TiO₂ catalyst carrying Cr₂O₃ and BaO to accelerate the following reaction:



simultaneously converting COS to H₂S by using the TiO₂ catalyst carrying Cr₂O₃ and BaO.